

## WHAT IS CLAIMED IS:

1. A flat display device comprising:

a flat display body module unit including a flat display body and display body driving means for driving said flat display body; and

a display control unit for controlling said flat display body module unit disposed separately therefrom, characterized by further comprising a signal management control means having a signal detection means for detecting an occurrence of abnormality in a first signal transferred from said display control unit, and a sequence processing means for changing a signal form on the side of said flat display body module unit on the basis of said detection signal.

2. The flat display device as set forth in claim 1, wherein said signal management control means is provided on the side of said flat display body module unit.

3. The flat display device as set forth in claim 1 or 2, wherein said signal detection means is a signal stop detection means for detecting a stoppage of said first signal, and said sequence processing means is a forced stop control means for control-setting, to zero, a display body application voltage, supplied to said flat display body, of said display driving means on the basis of an output of said signal stop detection means.

4. The flat display device as set forth in claim 3, wherein said forced stop control means includes a first signal delay means for delaying a second signal transferred from the side of said display control unit by an output of said signal stop detection means.

1 5. The flat display device as set forth in claim 4, wherein said  
2 forced stop control means includes a control terminal of a third  
3 signal, an output transmission of which is to be controlled.

4 6. The flat display device as set forth in claim 5, further  
5 comprising said n-pieces of signal management control means where  
6 n is a positive integer, and types of detected signals inputted as said  
7 first signals to said respective signal management control means are  
8 different from each other.

9 7. The flat display device as set forth in claim 6, wherein a control  
10 output of said k-th signal management control means is a third signal  
11 of said (k + 1)th signal management control means where  $k = 1, \dots, n -$   
12 1, and display on/off of said display body driving means is controlled  
13 based on a control output of said n-th signal management control  
14 means.

15 8. The flat display device as set forth in any one of claims 4 to 7,  
16 wherein said first signal delay means receives an input of a frame  
17 start signal as said second signal and is N-staged D-type flip-flops  
18 settable and resettable based on an output of said signal stop  
19 detection means where N is a positive integer.

20 9. The flat display device as set forth in claim 7 or 8, wherein said  
21 flat display body module unit incorporates a power source control  
22 means for controlling power on/off of a display body power source  
23 means for generating display body driving voltages on the basis of  
24 the output of said signal stop detection means and a fourth signal as  
25 well.  
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1 10. The flat display device as set forth in claim 9, wherein said  
2 power source control means includes a second signal delay means for  
3 delaying said second signal transferred from said display control unit  
4 by the output of said signal stop detection means.

5 11. The flat display device as set forth in claim 10, wherein said  
6 second signal delay means receives an input of a frame start signal  
7 as said second signal and is M-staged ( $M < N$ ) D-type flip-flops  
8 settable and resettable based on the output of said signal stop  
9 detection means where M is a positive integer.

10 12. The flat display device as set forth in any one of claims 1 to  
11 11, wherein said flat display body is a liquid crystal display panel.

12 13. The flat display device as set forth in any one of claims 1 to  
13 11, wherein said flat display body is a plasma display panel.

14 14. A display body driving device, provided on the side of a flat  
15 display body module unit, for supplying display body driving  
16 voltages to a flat display body on the basis of a variety of signals  
17 from a display control unit, said driving device comprising:

18 a signal detection means for detecting an occurrence of  
19 abnormality of a first signal transferred from the side of said display  
20 control unit; and

21 a sequence processing means for changing a signal mode on the  
22 side of said flat display body module unit on the basis of a detection  
23 output thereof.  
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1 15. The display body driving device as set forth in claim 14,  
2 wherein said signal detection means is a signal stop detection means  
3 for detecting a stoppage of said first signal, and said sequence  
4 processing means is a forced stop control means for control-setting,  
5 to zero, a display body application voltage supplied to said flat  
6 display body on the basis of an output of said signal stop detection  
7 means.

8 16. The display body driving device as set forth in claim 15,  
9 wherein said forced stop control means includes a first signal delay  
10 means for delaying a second signal transferred from the side of said  
11 display control unit by an output of said signal stop detection means.

12 17. The display body driving device as set forth in claim 16,  
13 wherein said forced stop control means has a third signal input  
14 terminal, an output transmission of which is to be controlled.

15 18. The display body driving device as set forth in claim 17,  
16 where in said signal delay means receives an input of a frame start  
17 signal as said second signal and is N-staged D-type flip-flops settable  
18 and resettable based on an output of said signal stop detection means  
19 where N is a positive integer.

20 19. The display body driving device as set forth in any one of  
21 claims 15 to 18, wherein said signal management control means  
22 includes a power source control means for controlling power on/off  
23 of a display body power source means for generating display body  
24 driving voltages on the basis of the output of said signal stop  
25 detection means and a fourth signal as well.

1 20. The display body driving device as set forth in 19, wherein  
2 said power source control means includes a second signal delay  
3 means for delaying said second signal transferred from said display  
4 control unit by the output of said signal stop detection means.

5 21. The display body driving device as set forth in claim 20,  
6 wherein said second signal delay means receives an input of a frame  
7 start signal as said second signal and is M-staged ( $M < N$ ) D-type flip-  
8 flops settable and resettable based on the output of said signal stop  
9 detection means where M is a positive integer.

10 22. The display body driving device as set forth in any one of  
11 claims 14 to 21, wherein said display body driving device is a liquid  
12 crystal driving device for driving a liquid crystal display panel.

13 23. The display body driving device as set forth in claim 22,  
14 wherein said liquid crystal driving device is a semiconductor  
15 integrated circuit.

16 24. The display body driving device as set forth in claim 23,  
17 wherein said semiconductor integrated circuit is Y drivers.

18 25. The display body driving device as set forth in claim 24,  
19 wherein said Y drivers are scan drivers of a simple matrix liquid  
20 crystal display device.

21 26. The display body driving device as set forth in claim 24,  
22 wherein said Y drivers are gate drivers of an active matrix- liquid  
23 crystal display device.

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